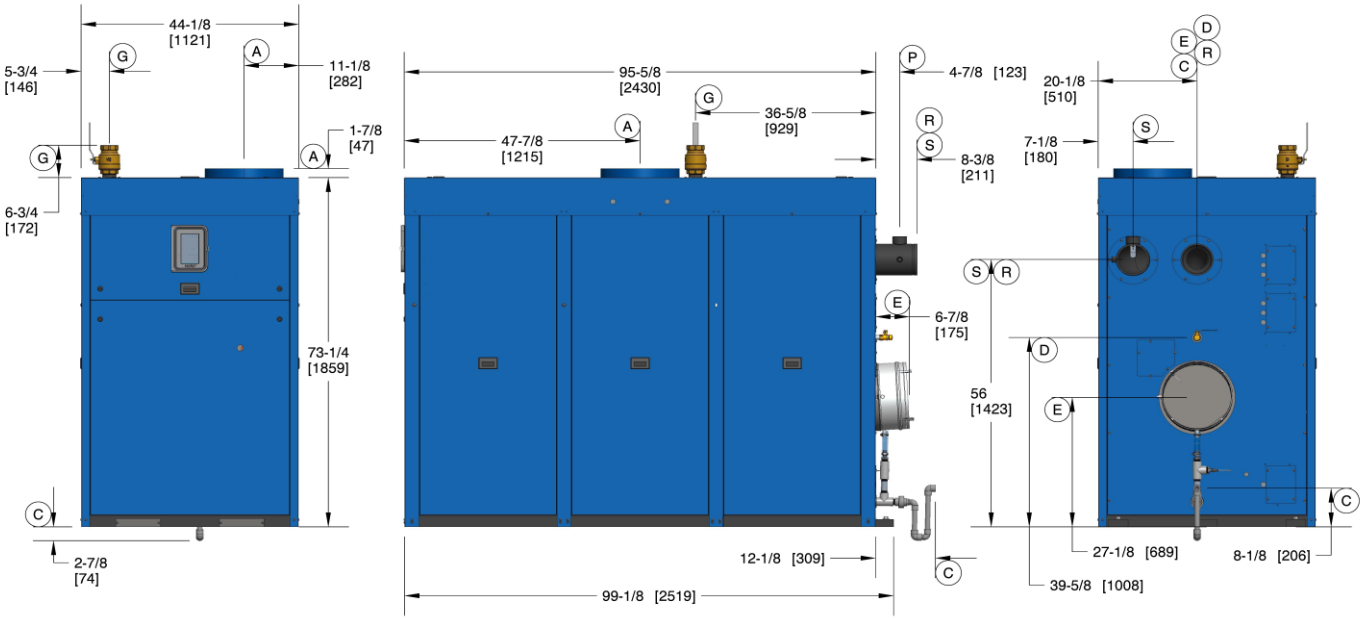
P-K STORM™

Boiler Models ST-5000 / ST-6000 / ST-8000
Natural Gas with NURO® Control

PATTERSON-KELLEY

Rep Name: _____ **Email:** _____

Phone Number: _____ **Date:** / /



Primary dimensions are in inches. The secondary dimensions, [in brackets], are in millimeters.

This boiler requires Category IV venting (condensing-positive pressure) or Category II venting† (condensing -negative pressure as defined in ANSI Z223.1/NFPA 54/CSA-B.149 latest edition.

†Category II venting must include the optional combustion air damper

BOILER CONNECTIONS

		ST-5000	ST-6000	ST-8000
A	Combustion Air Inlet	16" dia. stub		
C	Condensate Drain	3/4" CPVC		
E	Exhaust Vent	14" dia.		
F	Heat Exchanger Drain	3/4" hose		
G	Natural Gas	2-1/2" NPT-F		
H	Wiring Junction Boxes	inside cabinet		
P	Pressure Relief Valve	see list for options		
R	Boiler Return, Victaulic® clamp	6" grooved		
S	Boiler Supply, Victaulic® clamp	6" grooved		
X	Anchor Bolt Locations	(4) 5/8" Bolt Holes (2 inside cabinet)		

BOILER CONTROLS

ASME CSD-1 is standard
Complies with: GE GAP (IRI) guidelines GAP.4.1.0 and GAP.4.1.3
FM Global 6-4 Section 1.0
Main Gas Train with Dual Shut-off
Integrated Boiler Control, NURO Series
Operating Thermostat, 42º-195ºF (5.6º-91ºC)
High Limit Thermostat, Manual Reset, 100º-200ºF (38º-93ºC)
High Limit Thermostat, Auto Reset, Fixed 200ºF (93ºC)
High Exhaust Back Pressure Switch
Flow Switch, Paddle Type & LWCO, Probe Type
Combustion Air Proving Switch, Differential Pressure Type
Combustion Blower, Variable Speed, 8000 Watt

A.S.M.E. SECTION IV DESIGN DATA

	ST-5000	ST-6000	ST-8000
Max Pressure	160 PSIG		
Max Allowable Temperature	210°F		
Max Setpoint	185°F		
Heated Wet Surface Area	448.67 ft^2		
Flow Rate @ 20°FΔT	482.5 GPM	582 GPM	786 GPM
Min Flow Rate @ All Firing Rates (Flow Switch	161 GPM	194 GPM	256 GPM

MODEL SELECTION

Boilers	☐ ST-5000	☐ ST-6000	☐ ST-8000
Fuel Options	☐ Natural Gas		
Min Inlet Gas Pressure	3.5" w.c.		
Max Inlet Gas Pressure	14" w.c.		
Max Input (BTU/hr)	4,999,999	6,000,000	8,000,000
Max Output (BTU/hr)	4,824,000	5,820,000	7,680,000
Boiler HP	149.3	179.2	238.9
Min Input (BTU/hr)	500,000	600,000	800,000
Min Output (BTU/hr)	485,000	582,000	768,000
Turndown Ratio	10:1		
Operating Weight	3700 lbs.	3700 lbs.	3800 lbs.
Shipping Weight	3200 lbs.	3200 lbs.	3300 lbs.
Boiler Water Content	60 gallons		
Shipping Dimensions	110" x 48" x 80"		
Power Supply	☐ 208-240V 3ph 60 Hz		☐ 440-480V 3ph 60 Hz
Operating Current	☐ 25 Amps (240V)		☐ 15 Amps (480V)
Recommended Minimum Circuit Capacity	☐ 30 Amps (240V)		☐ 15 Amps (480V)

PRESSURE RELIEF VALVE

Shipped Loose for Field Installation

☐	50 PSIG 2"x 2-1/2"	15-160 psi/0-250°F
☐	60 PSIG 1-1/2"x 2"	15-160 psi/0-250°F
☐	75 PSIG 1-1/2"x 1-1/2"	15-160 psi/0-250°F
☐	80 PSIG 1-1/2"x 1-1/2"	15-160 psi/0-250°F
☐	100 PSIG 1-1/4"x 1-1/4"	15-160 psi/0-250°F
☐	125 PSIG 1-1/4"x 1-1/4"	15-160 psi/0-250°F
☐	150 PSIG 1-1/4"x 1-1/4"	15-160 psi/0-250°F

RECOMMENDED CLEARANCE FOR SERVICE ACCESS

Front - 36" / 72" **	Rear - 18"	Top - 36"	Left Side - 24"	Right Side - 6"

Notes:

- Victaulic is a registered trademark of Victaulic Company, Easton PA, USA
-Patterson-Kelley reserves the right to make changes at any time without notification

** ST8000 Front clearance is 72"